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Before The
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Communications Assistance for Law Enforcement Act	)	CC Docket No. 97-213
	)	
	)	

To: The Commission

COMMENTS OF THE CELLULAR TELECOMMUNICATIONS INDUSTRY ASSOCIATION REGARDING FURTHER NOTICE OF PROPOSED RULEMAKING

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CONTENTS

SUMMARY i

I. THE COMMISSION'S OBLIGATION TO CONSIDER THE COST OF CALEA AND ITS IMPACT ON SUBSCRIBER RATES AND COMPETITION 3

A. The Price of JSTD-025 5

B. The Cost of the Punch List is Unknown and There Is No Framework to Collect the Information 8

C. The Impact on Wireless Carriers and Subscribers 11

D. The Impact on New Services 14

II. THE COMMISSION'S CALEA CAPABILITY CONCLUSIONS OF LAW 20

1. Content of Subject-Initiated Conference Calls 24

2. Party Hold, Join and Drop on Conference Calls 26

3. Subject-initiated dialing and signaling 28

4. In-Band and Out-of-Band Signaling 31

5. Timing Information 32

6. Surveillance Status, Continuity Check and Feature Status 33

7. Dialed Digit Extraction 33

III. JSTD-025 AMENDMENT 37

IV. CONCLUSION 40

SUMMARY

The Cellular Telecommunications Industry Association ("CTIA") urges the Federal Communications Commission ("Commission") to reject, on substantive legal grounds, the additional surveillance capabilities sought by the Federal Bureau of Investigation ("FBI") and the Department of Justice ("DOJ") in this Further Notice of Proposed Rulemaking ("FNPRM"), dated November 5, 1998, under the Communications Assistance for Law Enforcement Act ("CALEA").

The Commission failed to conduct an adequate legal analysis of each punch list item to sustain its tentative conclusions. The punch list simply is beyond the scope of Section 103 of CALEA.

If the Commission still concludes some punch list items are required after further review, CTIA urges the Commission to undertake a careful analysis of the impact of any punch list feature on the cost of CALEA compliance, subscriber rates, competition and the introduction of new services and technology. Part of that review must include the cost of JSTD-025 itself. Indeed, the Commission must consider the total dinner bill, not just the cost of dessert.

Once the costs are known, Section 107 requires the Commission to reject any additional surveillance capability that adversely affects the public interest. The punch list certainly fails to satisfy Section 107.

Finally, any amendments of the industry standard that are required should be done by the industry standard-setting organization that promulgated the CALEA standard. These industry experts can optimize the capabilities ultimately required by the Commission.

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The Cellular Telecommunications Industry Association ("CTIA")[1] submits these comments in response to the Federal Communications Commission ("Commission") Further Notice of Proposed Rulemaking ("FNPRM"), dated November 5, 1998, regarding the scope of the assistance capability requirements

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[1] CTIA is the principal trade association of the wireless telecommunications industry. Membership in the association encompasses all providers of commercial mobile radio services and includes 48 of the 50 largest cellular and personal communications services providers as well as others with an interest in the wireless communications industry.

of the Communications Assistance for Law Enforcement Act ("CALEA").[2]

Despite strong industry opposition to any change in the industry standard to implement CALEA, the Commission tentatively has concluded that some additional surveillance capabilities should be added to the standard. CTIA continues to object, on substantive legal grounds, to the proposed additions to the standard.

Moreover, even if the Commission is correct about the scope of CALEA's requirements, it can only promulgate a final rule based upon conclusions of law and findings of fact that the technical requirements it proposes will be the most cost-efficient implementation of CALEA with the least impact on subscriber rates, competition, and the introduction of new technologies. The FNPRM set forth no framework for making this record.

At this time, only DOJ has the information regarding the aggregate cost of CALEA compliance, and they have not made it

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[2] *In the Matter of Communications Assistance for Law Enforcement Act*, CC Docket No. 97-213, *Further Notice of Proposed Rulemaking* (adopted October 22, 1998, released November 5, 1998).

available. Yet even though the partial cost data that CTIA has gathered shows that the hardware and software costs of implementing the industry's standard alone is as much as ten times what Congress authorized the Attorney General to spend when it passed CALEA in 1994. The Commission has an obligation to ensure an open and accountable process under Section 107 and it remains to be seen whether this comment cycle will produce the necessary record.

I. THE COMMISSION'S OBLIGATION TO CONSIDER THE COST OF CALEA AND ITS IMPACT ON SUBSCRIBER RATES AND COMPETITION

The Commission's FNPRM will not produce a final rule that meets the mandate of Section 107 of CALEA to establish standards that, among other things, implement CALEA in the most cost-efficient manner, have the least impact on subscriber rates, foster competition and ensure the future introduction of new services.[3] It will not do so because the

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[3] Specifically, Section 107 of CALEA requires the Commission to establish, by rule, technical requirements or standards that--

> (1) meet the assistance capability requirements of section 103 by cost-effective methods;

Commission (1) has not solicited any comments on the cost of implementing JSTD-025, which will be the foundation of its final rule; (2) has not provided a framework for gathering what it knows to be competitively sensitive information about the cost of the punch list; and (3) has not indicated how such information if gathered would be considered by the Commission.[4]

The Section 107 factors are not merely hortatory. For any final rule to stand, the Commission has an obligation under the statute to make specific findings on cost and competition. It cannot shift the burden to carriers, who do

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> (2) protect the privacy and security of communications not authorized to be intercepted;
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> (3) minimize the cost of such compliance on residential ratepayers;
>
> (4) serve the policy of the United States to encourage the provision of new technologies and services to the public; and
>
> (5) provide a reasonable time and conditions for compliance with and the transition to any new standard, including defining the obligations of telecommunications carriers under section 103 during any transition period.

[4] If it does receive price information on the punch list, the data likely will be submitted under the Commission's

not by and large even possess the information, and then declare a rule sound when no public information is forthcoming. Indeed, a review of the FNPRM reveals that the Section 107 factors play precious little in the Commission's logic. More must be done.

A. The Price of JSTD-025

The Commission has not sought any comment on the cost of implementing JSTD-025. It remains to be seen whether carriers and manufacturers will nonetheless provide this information in their initial comments. CTIA has urged its members to do so because, the Commission should make no mistake, the first dollar spent on CALEA will not be on the punch list. When considering the impact on subscriber rates, competition and the introduction of new services and technology, the Commission must consider the total dinner bill, not just the cost of dessert.

It is unclear why the Commission thought that the cost to implement JSTD-025 was not worthy of note. The Commission acknowledged in the FNPRM that "the most efficient and effective method for ensuring that CALEA can be implemented as

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confidentiality rules. The Commission cannot rely on such

soon as possible is to build on the work that has been done to date [by industry]."[5] With that in mind, the Commission stated that it did not intend to reexamine any of the uncontested technical requirements of JSTD-025.[6] Fair enough, and CTIA agrees that no one disputes the "core" capabilities in JSTD-025 are substantively required by Section 103; but that is not to suggest that the work done to date is free of cost, impact or relevance to Section 107 findings in this rulemaking.[7]

At this point, CTIA cannot help the Commission in its proceedings. Only one party to these proceedings has the requisite information on the cost of JSTD-025 -- the FBI. The Attorney General requested last Spring that industry provide

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private data without public comment.

[5] FNPRM, ¶ 44.

[6] FNPRM, ¶ 45.

[7] Nor is it to suggest that JSTD-025 now or as amended will be reasonably achievable for every carrier. The Commission correctly recognized in the FNPRM that CALEA does not mandate use of, or adherence to, any particular standard and that compliance with an industry standard is voluntary. FNPRM, ¶ 32. Some carriers may have no choice, however, because of the absence of CALEA-compliant equipment in the marketplace other than from their primary vendors. In that case, it may well be that a carrier petitions the Commission

her with cost information on an expedited basis. The equipment manufacturers responded and the FBI has consolidated that information and actually discussed the results with some Members of Congress and their staffs [hereinafter the "Reno Report"], but the Attorney General has not released the report to industry or the public as promised. CTIA, PCIA, USTA and TIA have asked the Attorney General to make the Reno Report available to the Commission and to disclose her methodology and assumptions in reaching her conclusions.[8]

We hope that the Attorney General will take the same steps in dealing with the Commission that she took in dealing with Congress in terms of releasing information.[9] There is no other source of aggregate industry information available. Thus, absent the Attorney General's cooperation, the record

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under Section 109 for relief. The fact that a standard exists does not mean every carrier can afford the resulting product.

[8] Joint Industry Association letter dated December 4, 1998, attached hereto as Exhibit A.

[9] CTIA understands that the information was submitted to the FBI by various manufacturers pursuant to nondisclosure agreements (NDAs) covering individual pricing data and methodology, but not as to aggregate information. Also, the FBI took extraordinary steps to obtain waivers of the NDAs to share information with Congress. The Commission deserves no less.

may never be complete and the Commission will not be able to make findings on the Section 107 factors.[10]

B. The Cost of the Punch List is Unknown and There Is No Framework to Collect the Information

The Commission has strongly encouraged comment on the applicability of the Section 107(b) factors to those punch list items it determined are required by CALEA.[11] Wireless carriers simply are not in possession of that information. Instead, just as with the cost of JSTD-025, only the FBI has aggregate data regarding the cost of the punch list items.

CTIA has encouraged its carrier members to consult with their manufacturers and to seek such information directly from their vendors. However, for the most part, that information has not been made available. A variety of reasons have been cited for the lack of information.

Some vendors claim that pricing information cannot be provided until there is a stable set of punch list

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[10] If the Commission is able to aggregate cost data from the initial comments in these proceedings, the Reno Report will still be relevant for comparison to the cost data submitted by industry members.

[11] FNPRM, ¶ 29.

requirements to price. Any assumptions about price would be more guess than art, they say, but based on an understanding of FBI demands, vendors have said publicly that the development effort for the punch list will be the equivalent of the effort for JSTD-025 -- essentially doubling the cost of compliance.[12] Some pricing information on the punch list was provided to the Attorney General, but CTIA is not aware of the assumptions used to arrive at any number. Again, CTIA has asked the Attorney General to share any such assumptions publicly so that the Commission and industry can comment appropriately.

CTIA also understands that vendors will not provide pricing information on the punch list for competitive reasons[13] without a promise of confidentiality. However,

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[12] Anecdotally, one vendor has told CTIA that an existing switching platform contains over 1 million lines of code. Adding the punch list would require another million lines of code. Even a lay person can understand the relative complexity of such a proposition.

[13] Some manufacturers also have raised an antitrust liability concern if they release pricing information. Here again, the Department of Justice holds the key and could issue an opinion as to whether such disclosure violates antitrust laws. Yet, despite knowing of this concern since at least last Spring when the pricing exercise commenced, DOJ has taken no steps to assuage the legitimate concerns of manufacturers.

apparently, some manufacturers intend to submit pricing information to the Commission with a request for confidentiality under the Commission's rules.[14]

The Commission generally does not grant confidential treatment to information submitted as part of a rulemaking unless the subject matter relates to competitively sensitive or proprietary information where the party submitting the material could be harmed by disclosure.[15] While confidential treatment may be warranted for the cost data of interest here, Congress intended Section 107 proceedings be open and on the record.[16] The Commission cannot rely on private data in

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Antitrust concerns did not deter DOJ itself from collecting price information and releasing it on an aggregate basis.

[14] *See* 47 C.F.R. § 0.459 (as revised by Report and Order (R&O) 98-184, released July 29, 1998). Manufacturer customers, however, will not be provided the information. Some CTIA carrier members have been told that even if they were provided information, assuming it was available, they would not be free to share it with the Commission in public comments due to competitive concerns.

[15] *Id.*

[16] House Report at 3507 ("This section is also intended to add openness and accountability to the process of finding solutions to intercept problems. Any FCC decision on a standard for compliance with this bill must be made publicly.")

promulgating a rule and deny interested parties the opportunity to comment.

In any event, the Commission gives no hint in the FNPRM as to how it expects to handle whatever cost information it may receive. Will it be held confidential? How will it be used? What standard will the Commission apply to the data in reaching its Section 107 findings? All of these things should have been addressed in the FNPRM.

One thing is clear -- if the Commission receives any cost information and does not disclose it or make it available during the comment cycle, another comment period will be needed, indeed, will be required by law, before the rule can become final.

C. The Impact on Wireless Carriers and Subscribers

The FBI, through its cost recovery rules promulgated under Section 109 of CALEA, effectively has ensured that no wireless carrier will ever receive any payment for any CALEA modification or upgrade.[17] Indeed, in the four years since

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[17] Under FBI cost recovery rules, carriers are only eligible for reimbursement for retrofitting equipment that was installed, operational and delivering service to customers

CALEA was enacted, the FBI has not commissioned a single wireless carrier or manufacturer to make any equipment modification to any equipment, facilities or services. Despite having over $100 million in the bank and a $400 million line of credit, not a penny has been applied to CALEA upgrades, and under the FBI cost recovery rules, not a penny is likely to be forthcoming. Rather, the wireless industry, and the customers it serves, will bear the entire burden of CALEA.[18]

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before January 1, 1995, despite the clear mandate in CALEA that carriers would be entitled to reimbursement if the equipment was either installed or deployed prior to that date. 47 U.S.C. § 1008. The industry has challenged the cost recovery rules as arbitrary and capricious, *CTIA et al. v. Reno,* Case No. 1:98CV02010, (D.C. D.C. 1998), but for the Commission's purpose, it must assume that the vast majority of wireless switches installed after 1995 (which includes all of PCS equipment), must be retrofitted at wireless carrier expense.

[18] In addition to hardware and software necessary for CALEA compliance, the FBI recognizes in its cost recovery rules numerous other categories of expenses carriers will incur: network operations costs related to the ongoing management and maintenance of the CALEA equipment; plant costs in addition to hardware and software such as inspecting, testing and reporting on the condition of telecommunications plant to determine the need for replacements, rearranges and changes; rearranging and changing the location of plant not retired; inspecting after modifications have been made; the costs of modifying equipment records, such as administering trunking and circuit layout work; modifying operating procedures; property held for future telecommunications use; provisioning costs; network operations costs; and receiving

Yet CTIA understands that the Reno Report discloses that the government can obtain a significant price discount -- perhaps as much as 40% -- for a nationwide acquisition of vendor CALEA solutions. The discount is due, no doubt, to the large number of switches affected by such a "bulk" sale. The government would then be free to license the CALEA software for post-1995 installations or to give it away free to upgrade pre-1995 installations or deployments.

Conversely, no single carrier can command that sort of price discount. If this is true, and CTIA specifically asks the Commission to inquire, then the most cost-effective method to implement CALEA would be for the government to buy the solution and make it available to carriers -- sort of a government buyers' club for CALEA equipment. Whatever the ultimate cost, wireless carriers will have no means of

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training to perform plant work; the costs of direct supervision and office support of this work. *See* 28 C.F.R. § 100.11. (Allowable Costs). The FBI also recognizes that carriers will incur general and administrative expenses related to management, financial, and other expenditures which are incurred by or allocated to a business unit as a whole like Accounting and Finance, External Relations, Human Resources, Information Management, Legal, Procurement. *See* 28 C.F.R. § 100.15.

recouping the CALEA costs other than through direct charges to subscribers.[19]

D. The Impact on New Services

The CALEA cost impact is especially pernicious for new entrants, personal communications service, and rural carriers, all of whom have smaller customer bases over which to spread the costs. The higher the cost of CALEA, the higher the barrier to entry both for both new carriers and for carriers introducing new services.

The FBI blithely admits that implementation of CALEA in some cases, will have the actual effect of delaying the introduction of new services, stating:

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[19] Although carriers are entitled to be compensated for reasonable expenses incurred in providing wiretap facilities or assistance, 18 U.S.C. § 2518(4)(e), it is an open question whether carriers can include within their charges an amortized portion of the cost of unreimbursed CALEA upgrades. CTIA specifically asks the Commission to address this issue. Ordinarily, the law enforcement agency pays only for the cost of provisioning the wiretap, the leased lines, and (although it varies from carrier to carrier) administrative, labor and maintenance costs. If the cost of each wiretap were recouped over the depreciable life of the software or equipment, perhaps 3-5 years, carriers would recover the reasonable expenses of providing a wiretap from law enforcement rather than ratepayers.

> Carriers do not modify or upgrade equipment at random; such business decisions are made so that they will ultimately increase a carrier's revenue. With the promulgation of this definition, [proposed significant upgrade rule] carriers will be able to factor the requirements and costs of CALEA compliance into their decisions, thereby being able to determine if upgrading or modification is the best decision at that time.[20]

In other words, in the FBI's view, if a carrier cannot afford to buy the entire CALEA compliance package, it cannot make the new services available at all. This result is ironic given that Congress stated just the opposite concerning the effect of CALEA on new services:

> The Committee's intent is that compliance with the requirements in the bill will not impede the development and deployment of new technologies. . . . This means that if a service of [sic] technology cannot reasonably be brought into compliance with the interception requirements, then the service or technology can be deployed. This is the exact opposite of the original versions of the legislation, which would have barred introduction of services or features that could not be tapped. One factor to be considered when determining whether compliance is reasonable is the cost to the carrier of compliance compared to the carrier's overall

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[20] Implementation of Section 109 of the Communications Assistance for Law Enforcement Act: Proposed Definition of "Significant Upgrade or Major Modification", 63 Fed. Reg. 23231, 23234 (April 28, 1998).

> cost of developing or acquiring and deploying the feature or service in question.[21]

Thus, in Congress' view, unlike that of the FBI, if CALEA compliance cannot be achieved at a reasonable cost, the new service may be made available in any event.

Another way to examine the measurable harm of the CALEA surcharge is to examine the impact on demand for wireless services. It has been demonstrated that the elasticity of demand for wireless service is <-0.51>.[22] That is, for each dollar increase in the price for services, there will be a corresponding, negative impact of more than 50% in demand. The growth of wireless services as prices have declined is the corollary to this fact about wireless communications. Make no mistake: higher cost means less demand; less demand means fewer new services introduced; fewer options and choices, and fewer new entrants -- in short, less benefit for the public. Of course, until the actual cost of CALEA is known, the true impact on customer rates and the introduction of new services cannot be known, but the elasticity study shows that there is

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[21] House Report at 3499.

a direct relationship between regulatory costs and demand for services.[23]

There is another direct impact from these CALEA costs that should be considered. There is a limited number of engineering hours and resources to develop CALEA while at the same time developing other goods and services that are in the public interest and consistent with the Federal policy of promoting new technologies. All parties and the Commission essentially agreed in regard to the extension of the CALEA compliance date that manufacturers needed at least 18 months to develop solutions from the industry standard and carriers needed another six months of testing and application before CALEA-compliant equipment could be installed across the network.[24] Development of the punch list would be a similar, major undertaking.

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[22] Hausman, J.A., *Valuing the Effect of Regulation on New Services in Telecommunications*, (Brookings Papers on Economic Activity 1997) at 22.

[23] In a competitive market, all new costs will be passed on to users because by definition the market forces the supplier to price its services at cost.

[24] *See Petition for the Extension of the Compliance Date under Section 107 of the Communications Assistance for Law Enforcement Act by AT&T Wireless Services, Inc., Lucent*

The Commission should not presume that the task is trivial because "TIA has been examining CALEA technical standards issues for several years . . . . all of the technical requirements that [the Commission] have identified for modification were previously considered in detail by TIA Subcommittee TR45.2."[25] To the contrary, none of the punch list items were subjected to engineering scrutiny in the JSTD-025 standards process -- they were proposed in concept and eliminated in fact because industry considered them beyond the scope of CALEA. Amended JSTD-025 will not be simply a matter of "cut and paste," but will require that substantial engineering resources be committed to the project. These are engineering resources that otherwise would be available for development of new services for the public.

It is not only new commercial services that are at risk. Carriers and manufacturers are striving to ensure Year 2000 compliance and to meet a host of other Commission mandates such as E911 service, number portability, electronic audit provisions for consumer proprietary network information, and

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Technologies and Ericsson, Inc., Memorandum and Order, FCC 98-223, (released September 11, 1998).

[25] FNPRM, ¶ 133.

TTY. Some carriers have construction deadlines to meet under spectrum rules. At the same time, carriers are competing to introduce new or enhanced features to stay competitive and to meet consumer expectations and demand. Depending on the Commission's actions in this proceeding, CALEA may be the straw that breaks the regulatory camel's back.

Finally, Section 107(b)(5) permits the Commission to establish the terms and conditions for achieving compliance during any transition to new standards. If the Commission does require amendment of JSTD-025, CTIA urges the Commission to take into consideration the substantial impact an unplanned upgrade will have on carriers. Vendors usually combine software upgrades into the next generic release. Not every carrier will purchase each new generic upgrade just as consumers do not purchase a new car every time a new model is introduced. Carriers plan and coordinate their next upgrade with their vendors to ensure adequate, across the network support for the transition. The CALEA capability should be implemented no differently.

The Commission believes that the June 30, 2000, compliance deadline provides adequate time for carriers to

implement the core standard requirements.[26] Maybe so, but the Commission really should ask whether efficiencies can be gained by combining the core with any punch list amendments. If so, then a new compliance date may need to be set.

II. THE COMMISSION'S CALEA CAPABILITY CONCLUSIONS OF LAW

The Commission has reached tentative conclusions of law that certain punch list items are within the scope of Section 103. CTIA continues to disagree and in particular would have preferred that the Commission set out a more detailed rationale for its legal conclusions. For example, the Commission never addressed the argument presented by CTIA in its May 20, 1998, comments that call-identifying information was limited to the dialing and signaling information used in call setup.[27]

That reasonable people can differ about the meaning of call-identifying information is clear on the face of the record. Thus, there can be no doubt that the definition is ambiguous and not susceptible of a plain language

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[26] FNPRM, ¶ 46.

interpretation. Rather, the Commission must resort to tools of statutory construction such as the legislative history and the accepted canons of statutory construction. However, the Commission did no such thing despite paying brief respects to the Congressional mandate to construe CALEA narrowly.[28] Rather, by *ipse dixit*, the Commission tentatively concluded that one punch list item appeared to relate to the origin of a call and another punch list item appeared to relate to its direction and another appeared to relate to something else. This is no substitute for legal analysis and turns the mandate for a narrow construction into an enabling act.

The Congressional admonition to construe CALEA narrowly was not mere piffle. Congress understood that the terms of CALEA informed the very narrow surveillance exception to the general prohibition on wiretapping.[29] The wiretap exception

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[27] *See* CTIA Comments at 9-16.

[28] *See* FNPRM, ¶ 25 (citing House Report at 23).

[29] Congress intended to prohibit eavesdropping, save for a few specifically enumerated exceptions. *United States v. Jones*, 542 F.2d 661, 666 (6th Cir. 1976); *Pritchard v. Pritchard*, 732 F.2d 372, 374 (4th Cir. 1984).

is to be interpreted narrowly.[30] The Commission had an obligation to do so. For example, when Congress stated that call-identifying information was limited to "the numbers dialed or otherwise transmitted for the purpose of routing calls through the carrier's network,"[31] the Commission had an obligation to explain in legal terms how the signal generated when a subject goes off-hook and then on-hook without dialing any number is call-identifying .[32]

One disturbing revelation must be mentioned before proceeding to the substantive discussion. It has come to CTIA's attention that the FBI may have made an ex parte presentation to Commission staff where a simulation of the punch list was displayed. CTIA and industry members only recently were allowed to see the presentation and were astounded by its inaccuracy. CTIA has written the Attorney General to express concern about the inaccurate representation

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[30] *See United States v. Giordano*, 416, U.S. 505, 514-15 (1974) (noting that "Congress legislated in considerable detail...and evinced the clear intent to make doubly sure that the statutory authority be used with restraint.").

[31] House Report at 3501 (emphasis added).

[32] FNPRM, ¶ 88. Another example might be a network signal that lights a message waiting lamp. FNPRM, ¶¶ 93, 95.

of JSTD-025 and the punch list.[33] To the extent any of the Commission's findings were based on the presentation, they should be rejected; to the extent the Commission has any interest in viewing the inaccuracies in the presentation, CTIA would be pleased to provide that review.

One last general observation is in order. The Commission asked for comment under each punch list item regarding whether the information prescribed is "reasonably available."[34] The Commission never takes notice of the fact that industry has addressed this issues in the terms defined in JSTD-025:

> Call-identifying information is reasonably available if the information is present at an Intercept Access Point (IAP) for call processing purposes. Network protocols (except LAESP) do not need to be modified solely for the purpose of passing call-identifying information. The specific elements of call-identifying information that are reasonably available at an IAP may vary between different technologies and may change as technology evolves.[35]

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[33] Joint Industry Association letter to Attorney General Reno dated December 10, 1998, attached as Exhibit B.

[34] FNPRM, ¶ 25-26.

[35] JSTD-025 at § 4.2.1.

This definition is forward-looking and will be of use and easily applied by other industry associations or standard-setting organizations in the future as they address other technologies.[36] The "reasonably available" definition need not be left to ad hoc development even though, as the Commission correctly notes, it may vary from technology to technology.[37]

1. Content of Subject-Initiated Conference Calls

CTIA understands the Commission's conclusion to state no more than JSTD-025 allowed. But because provisioning adequate channels is a capacity issue, not a capability requirement, the standard did not address the extra provisioning of channels necessary to monitor both the subscriber's new call and the conference call on hold. Under JSTD-025, channels are provisioned on a first come, first served basis. If a law

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[36] CTIA also notes that in the absence of legislative intent to the contrary or other overriding evidence of a different meaning, technical terms or terms of art used in a statute are presumed to have their technical meaning. Norman J. Singer, 2A *Sutherland Statutory Construction,* § 47.29 (5th Ed. 1993). The Commission should give deference to the industry expert interpretation of the when signaling information is reasonably available within a network.

enforcement agency retains three lines for three different surveillance subjects and a fourth line is needed because one of the targets has the conference calling feature, the carrier should not be put in violation of the standard because it cannot service the wiretap. The capability the Commission describes must be conditioned upon adequate law enforcement provisioning.

The Commission correctly concludes that only those conference calls supported by the service, facilities or equipment of the subject need be modified.[38] A conference calling system that disconnects or reroutes the held portion of a conference call need not be reconfigured under the Commission's findings because the "'equipment, facilities, or services of a subscriber' are no longer used to maintain the conference call."[39]

The same is true for nonsubscriber-based services like "Meet Me" conference calling where a carrier or a third party provides a conference bridge to any person on-demand so that

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[37] FNPRM, ¶ 26.

[38] FNPRM, ¶ 78.

any party may join the call without being a subscriber of the carrier or third party conference call service provider.

2. Party Hold, Join and Drop on Conference Calls

This punch list item illustrates the Commission's use of *ipse dixit* in finding a capability to be call-identifying. The Commission tentatively concludes "that party hold/join/drop information falls within CALEA's definition of 'call-identifying information' because it is 'signaling information that identifies the origin, direction, destination, or termination of each communication generated or received' by the subject."[40]

The Commission's rationale? The party join information "appears" to identify the origin of a communication; the party drop "appears" to identify the termination of a communication; and most remarkable of all, the party hold "appears" to identify the "temporary termination, or re-direction of a

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[39] FNPRM, ¶ 78.

[40] FNPRM, ¶ 85.

communication."[41] But these appearances are deceiving and the Commission's legal conclusion is flawed.

The Commission addresses these so-called party messages as if they existed today. They do not. Even DOJ does not assert that they get such reports today.[42] So under what approach to statutory construction can the Commission create them? They do not "identify" the origin, destination, direction or termination of any communication because they do not exist today.

[43] CTIA also questions whether the Commission meant to imply that if the information like party messages *could be reasonably made available,* a carrier would have to provide it.[44] The CALEA standard is whether it *is* reasonably

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[41] FNPRM, ¶ 85

[42] DOJ Petition at 42 ("law enforcement was unable to obtain information that a particular participant was placed on hold during, or dropped from, a multi-party call.")

[43]

[44] For example, in regard to customer premises equipment (CPE), the Commission concluded that "party hold/join/drop information *could not be reasonably made available to the LEA* since no network signal would be generated." FNPRM, ¶ 86 (emphasis added).

available, not whether it could be made so in the future.[45] The Commission, as it notes elsewhere in the FNPRM, cannot rewrite CALEA to render a provision "mere surplusage,"[46] which would be the result of such a conclusion regarding the "reasonably available" limitation.

If the Commission lets stand its conclusion, the direction to industry (and law enforcement alike) upon remand to TIA should be to fashion technical requirements to provide for dynamic reporting of the party additions and drops in a subscriber-initiated conference call when the subject -- not any associate -- places the call on hold. Industry experts will find the most efficient method to report the activity.

3. Subject-initiated dialing and signaling

The Commission makes a startling array of conclusions regarding subject-initiated dialing and signaling. The signals at issue here are all predicates to other acts of dialing and signaling. JSTD-025 already appropriately

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[45] What is more, Congress clearly and unequivocally excluded CPE and the by implication the signals it generates from CALEA. House Report at 3503.

[46] FNPRM, ¶ 57, n. 106 (citations omitted).

identifies the origin, direction, destination or termination of a call. For example, a switchhook flash does not tell law enforcement where a call came from or to where it will be directed if a call forwarding feature is invoked. Instead, the JSTD-025 termination attempt and answer message will report all of that information and more when the subject attempts a call or forwards one.

The disturbing point with the call-forwarding feature is that law enforcement really wants to know immediately *when* the feature is invoked and the number to which the call will be redirected *if* a call is made to the subject in the future. This would be a useful investigative tool if phone systems were designed for such things because law enforcement would be able to identify the house or location to which some future call will be directed, whether or not the call is ever made. The Commission cannot, in good conscience, shoe-horn such potentially call-identifying information for possible future communications under the rubric "subject-initiated dialing and signaling," especially when the speculative call will be identified clearly if made under the industry standard.

Law enforcement also desires that the information be reported even if the call-forwarding feature is invoked

remotely such as through a pay phone.[47] CTIA need hardly explain the cost and complexity involved with this scheme, all again on the chance that some future call will be made that no one disputes will be identified at the time.

Subject-initiated dialing or signaling also includes such things as signals when a subject goes off-hook and then on-hook without dialing any digits, a switchhook flash, hold key, flash key, transfer key, or conference key. Only through a broad definition of call-identifying information and a Wonderland-like interpretation of origin, destination, direction and termination, can these signals be call "identifying." To be sure, the information is useful for investigative purposes and law enforcement gets such signals in the analog world, but CALEA only carried forward *call-identifying information*, not all signals used or useful in prior technologies that could have been obtained when law enforcement got the entire content channel.[48]

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[47] FNPRM, ¶ 91.

[48] CTIA notes that if "status quo" is the test of CALEA, then law enforcement should be required to obtain a content channel in the future to obtain any signal generated by a subscriber after call processing has been completed.

4. In-Band and Out-of-Band Signaling

The Commission states that it will not decide whether in-band and out-of-band signals are call content or call-identifying, but it seeks comment on what types of in-band and out-of-band signals are "technical requirements."[49] CTIA declines to guess. The Commission has an obligation under Section 107(b) to protect the privacy of communications not otherwise authorized to be intercepted.[50] The law requires only reasonably available call-identifying information to be provided. No other "technical requirements" can be imposed.

CTIA has long objected to the DOJ proposition that carriers provide any signaling that "can be sensed by the subject."[51] This rule would capture such things as a busy signal even though these signals are not generated by the system under surveillance.

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[49] FNPRM, ¶ 99. The Commission had no trouble making the determination that delivering the entire packet to law enforcement on a pen register order would be the unauthorized delivery of call content. FNPRM, ¶ 63.

[50] 47 U.S.C. § 1006(b).

[51] DOJ Petition at 47.

DOJ once informed the Commission that it did not believe such signals were required by CALEA.[52] Yet, in Enhanced Surveillance Standard ("ESS") meetings, the FBI retracted DOJ's position before the Commission, claiming that if the signal is "known" to the accessing system (i.e., perceptible by the subject), then it must be delivered to law enforcement. Notwithstanding the FBI position, tones generated by a switch other than the one under surveillance are not reasonably available and should not be required to be delivered.[53]

5. Timing Information

CTIA does not believe, as the Commission tentatively concludes, that timing is a matter of call-identifying information.[54] Nonetheless, the ESS committee has reached reasonable consensus with law enforcement on timing and the Commission can defer the issue to TIA.

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[52] DOJ Reply Comments at 57 ("The government's proposed rule is limited to in-band and out-of-band signaling 'from the subscriber's service' -- that is, signaling generated by the carrier providing the subscriber's service, not signaling generated by another carrier.").

[53] Here again, with a content channel, law enforcement may be able to extract the signal if it really is of interest.

[54] FNPRM, ¶ 104.

6. Surveillance Status, Continuity Check and Feature Status

CTIA supports the Commission's conclusion that surveillance status messages are not required by CALEA.[55] The simple, most practical and cost-efficient manner of determining that a surveillance is active is for law enforcement to communicate with the carrier. CTIA also supports the Commission's conclusion that feature status messages are not required by CALEA.[56] Law enforcement can obtain information about the features a subscribers uses through a simple subpoena.

7. Dialed Digit Extraction

The Commission again has ignored a strong legal analysis arguing against extraction of post-cut-through dialed digits.[57] The Commission never references the fact that Section 207 of CALEA mandates that law enforcement use technology reasonably available to it to restrict the recording of or decoding of electronic or other impulses to

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[55] FNPRM, ¶ 109.

[56] FNPRM, ¶ 121.

the dialing or signaling information utilized in call processing.[58] CTIA strongly opposes the development of technology that will make post-cut-through dialed digits available in the future.

Further, the Commission tentatively concludes that post-cut-through digits representing all telephone numbers needed to route a call, for example, from the subscriber's telephone, through its LEC or wireless carrier, then through an IXC and other networks, and ultimately to the intended party are call-identifying information."[59] But call-identifying information derives only from the equipment, facilities, or services "of a subscriber of such carrier," not from subsequent long distance carriers.[60] Each carrier in the sequence uses the dialed digits differently: pre-cut-through digits connect to the

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[57] CTIA Comment at 13-14.

[58] CALEA, Section 207 (codified at 18 U.S.C. § 3121(c)). Congress expressly stated that "dialing tones that may be generated by the sender that are used to signal customer premises equipment of the recipient are not to be treated as call-identifying information." House Report at 3501.

[59] FNPRM, ¶ 128.

[60] *See* 47 U.S.C. § 1002(a)(1). What law enforcement really wants is what Congress already told them they cannot

subscriber's carrier; post-cut-through digits access or authorize service from the long distance carrier; post-cut-through, post-authorization, digits complete the call to the intended recipient. The fact is that the subject's carrier has completed the call when the connection is made to the long distance carrier.

CTIA also opposes placing a carrier between law enforcement and a content channel on a mere pen register order. Carriers cannot distinguish between post-cut-through dialing that initiates a call through a long distance carrier and other signaling such as bank account numbers or credit card transactions. The carrier is not protected under statutory immunity provisions, the privacy of communications not authorized to be intercepted is not protected, and if the carrier provides law enforcement all of the post-cut-through dialing information, it may provide content information contrary to CALEA and the order.[61]

Finally, to effect post-cut-through dialed digit extraction, carriers generally would have to purchase special

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have: "guarantee[d] 'one-stop-shopping' for law enforcement." House Report at 3502. It should be rejected.

Dual Tome Multi-Frequency ("DTMF") tone decoders. One decoder would be required for each channel under surveillance. The decoders could not be shared between lines because a carrier would never know when a subject might engage in post-cut-through dialing. Thus, this requirement is not only a capability issue, it is a capacity issue as well. The FBI has stated unequivocally, but without explanation, that DTMF decoders are not reimbursable as a capacity expense.

But that is not the end of the story. For wireless carriers, DTMF tone decoders are unnecessary. The numbers dialed are sent over the air interface after the subscriber hits the SEND key unlike in wireline systems where tone decoders circuits are used to gather digits as they are pulsed from a landline phone. Thus, major software changes would be required for most wireless switches and significant changes would be required in the engineering and capacity guidelines for mobile switching centers to accommodate the additional hardware required for each surveillance.

The Commission must understand the true magnitude of costs involved with this punch list item. A carrier would

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[61] Again, the Commission determined such a procedure was

need enough DTMF decoders to meet the actual capacity requirements of the Attorney General set forth in her Final Notice of Capacity.[62] Actual capacity totals well over 100,000 channels nationwide. Moreover, carriers would have to have sufficient DTMF decoders available to scale to the maximum capacity -- roughly double the actual capacity -- within 5 days under the Final Notice.[63] This "capability" currently is provided by law enforcement today through their own equipment such as dialed number recorders or loop extenders. Thus, no other punch list item is as transparent for its cost-shifting acumen as this one.

III. JSTD-025 AMENDMENT

CTIA continues to support remand of any changes in the standard to TIA's Subcommittee TR45.2, because, as the Commission concludes, this will be the most efficient way to

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unacceptable for packet-mode intercepts. FNPRM, ¶ 63.

[62] Final Notice of Capacity, 63 Fed. Reg. 12218 (March 12, 1998).

[63] *Id.*

implement the Commission's final order.[64] However, the Commission's 180-day deadline is unrealistic.

As the Commission may know, industry has been attempting to standardize the punch list items in consultation with the FBI through another standard's setting effort known as the ESS process. Now almost a year old, industry still has yet to get a commitment that the current document reflects law enforcement's needs. Indeed, most recently, despite being asked for a contribution that specifically identifies any areas they believe require more attention, law enforcement simply referred industry to their proposed rule pending before the Commission. In short, anything less than acquiescence in their proposed rule has been inadequate and deficient.

In any event, the ESS process was not designed to optimize the surveillance capability from a carrier-vendor perspective, but rather to identify the law enforcement "customer" requirements and preferences. In this process, like any customer, law enforcement should have considered the cost and complexity of what they have demanded. But unencumbered from budgetary constraints, law enforcement

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[64] FNPRM, ¶ 133.

simply stood firm on the entirety of its proposed, gold-plated rule. Thus, the ESS document does not provide nearly as useful a guide to the punch list as it might have had the government participated fairly in the process.

Upon remand, CTIA invites the Commission to send a representative to the standards meetings to observe industry craft the necessary amendments. Through the standards process, participants will be able to offer alternatives and optimize features to implement whatever the changes might be.

These changes, once completed, will need to be vetted through the open comment and ballot process. At a minimum, ballot of an amended standard through TIA will take 90 days. If an American National Standards Institute standard is sought, the ballot period may be as long as 5 months. The result, however, will be worth it in terms of a better standards document with broad industry consensus.

As to the 180 days to complete the technical review, the Commission should understand that the more capabilities required, the more complex the development and the more time that will be required to complete the task. Based on the Commission's tentative conclusions, the 180-day cycle likely

is insufficient.[65] But, industry is committed to completing any amendment expeditiously, and perhaps as an alternative to a date certain, the Commission should task the subcommittee to report a schedule after its first meeting, which the Commission could alter if it disagreed.

IV. CONCLUSION

On substantive legal grounds, the Commission should reject the punch list. If the Commission still concludes some punch list items are required, CTIA urges the Commission to undertake a careful analysis of the impact of any punch list feature on the cost of CALEA compliance, subscriber rates, competition and the introduction of new services and

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[65] Many of engineers that have responsibility for electronic surveillance on the TR45.2 subcommittee also are committed to other TIA standards efforts, which cover such important Commission mandates as number portability and E911. Meeting schedules and locations are set months in advance and already extend well into 1999.

technology. Part of that review must include the cost of JSTD-025 itself.

Respectfully submitted,

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Vice President and General Counsel

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Vice President
Regulatory Policy & Law

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December 14, 1998

EXHIBIT A

CELLULAR TELECOMMUNICATIONS INDUSTRY ASSOCIATION
PERSONAL COMMUNICATIONS INDUSTRY ASSOCIATION
TELECOMMUNICATIONS INDUSTRY ASSOCIATION
UNITED STATES TELEPHONE ASSOCIATION

December 4, 1998

The Honorable Janet Reno
Attorney General
10th Street and Constitution Avenue, N.W.
Washington, DC 20530

Dear Ms. Reno:

Last spring, you requested that industry provide you cost information regarding the development and implementation of J-STD-025 and each of the Department of Justice's "punch list" items. Industry responded by providing you the requested information in short order.

We understand that individual submissions were subject to confidentiality agreements, but we are not aware that aggregate information similarly is protected. We also understand that some of this information you collected has been made available to Congress. And most recently, you advised Congress in a letter that moving CALEA's grandfather date would cost the government $2 billion, a figure we assume was based in part on the results of the cost study. Industry has never received a report of the results of the cost study despite your promise to provide such information.

Now, the Federal Communications Commission has expressly requested cost information as part of its pending rulemaking on DOJ's punch list. Given that DOJ has been able to provide Congress with cost data and has arrived at a $2 billion grandfather date change cost, we expect that DOJ will share its information with industry and the Commission as part of its December 14th comments.

Specifically, we ask you to provide the Commission as part of the DOJ comments, the basis for the $2 billion estimate to Congress. We also ask that you provide the Commission with whatever aggregate information from the cost study is available to you and disclose any assumptions or formula used to determine aggregate costs. We also understand that DOJ has stated that it has met with various parties regarding nationwide buy outs of specific platforms or equipment and now believes that there is a substantial cost advantage in such an approach. We ask that you explain this to the Commission and provide detailed information on these discussions and pricing assumptions.

It is important that the Commission receive this information so that it will have a complete record upon which to determine whether the punch list items satisfy Section 107 of CALEA. DOJ is well situated to advise the Commission regarding these issues based on its extensive discussions with all industry parties. Industry itself is at a great disadvantage in these proceedings because no one entity, other than DOJ, has had the benefit of all cost information. To provide effective and meaningful comments, DOJ's knowledge must be put on the record in the Commission's proceedings.

We look forward to your cooperation in providing this information to the Commission.

Sincerely,

Roy M. Neel
President & CEO
United States Telephone Association
(USTA)

Jay Kitchen
President
Personal Communications Industry Association
(PCIA)

Matthew J. Flanigan
President
Telecommunications Industry Association
(TIA)

Thomas E. Wheeler
President/CEO
Cellular Telecommunications Industry Association
(CTIA)

cc: The Honorable William E. Kennard
The Honorable Susan Ness
The Honorable Michael K. Powell
The Honorable Harold Furchtgott-Roth
The Honorable Gloria Tristani

EXHIBIT B

THE CELLULAR TELECOMMUNICATIONS INDUSTRY ASSOCIATION
THE PERSONAL COMMUNICATIONS INDUSTRY ASSOCIATION
THE TELECOMMUNICATIONS INDUSTRY ASSOCIATION
THE UNITED STATES TELEPHONE ASSOCIATION

December 10, 1998

The Honorable Janet Reno
Attorney General
10th Street and Constitution Avenue, N.W.
Washington, DC 20530

Attorney General Reno:

The Cellular Telecommunications Industry Association, the Personal Communications Industry Association, the United States Telephone Association and the Telecommunications Industry Association write to you to express concern with the accuracy of recent presentations made by the FBI to the Federal Communications Commission (FCC), various members of Congress and their staffs, and other organizations. Specifically, the industry associations believe that the "ESI Simulator" presentation simply is inaccurate, misleading and can only leave a false impression concerning the industry's standard for compliance with the Communications Assistance for Law Enforcement Act (CALEA) or what law enforcement would receive with the addition of any of its so-called "punch list" capabilities.

We write to request that you retract the ESI Simulation immediately and advise those that have seen it that it does NOT accurately represent the industry standard or punch list capabilities. Industry stands ready to work with you to develop an accurate representation of capabilities if such a presentation is necessary.

The Presentation

Despite the fact that, according to the FBI, the FBI has been privately showing the ESI Simulator to the FCC, the staffs of various Members of Congress and other organizations, the Enhanced Surveillance Standard (ESS) working group of the Telecommunications Industry Association (TIA) had to formally request a showing. After months of waiting, the presentation finally occurred on November 12, 1998, and was wholly inaccurate and misleading from the start.

The first example presented was intended to show law enforcement's need for a surveillance status message to know that a wiretap had been activated and was continually operational. The presenters stated repeatedly that without this message, law enforcement could not know that the wiretap was in place and would not be able to prove in court that earlier calls had not been received by the target. This, of course, is completely false.

Carriers service thousands of wiretaps and pen registers each year. In all cases, the carrier receives a Court Order to provide the surveillance and invariably calls the requesting law enforcement agency to set up the surveillance. In many cases, law enforcement provides specialized equipment. Clearly, cooperation is necessary between law enforcement and the carrier in order to establish the wiretap. Routinely and across the vast majority of wiretaps that are performed each year, law enforcement knows almost to the minute when a tap is installed and available to deliver information. If the law enforcement collection equipment is ready, then everything that is sent is received. As to the notion that the surveillance could be undermined in court, a carrier's call detail records will show what calls were made or received even if the law enforcement equipment was not ready to receive the surveillance information for some unexplainable reason. In short, the entire discussion of the surveillance status message was unfair and misleading.

Another misleading and untrue aspect of the ESI simulator was that the messages displayed were entirely fictitious. For example, the ESI Simulator showed messages (reporting ringback and power ringing) that cannot be generated from the accessing switch under surveillance and, in fact, must come from a terminating switch. The FBI, of course, is well acquainted with this issue because it was raised during the initial round of comments on the FCC's Public Notice -- the FBI specifically and unequivocally denied in its pleadings that it wanted signals generated from other than the accessing switch. After so informing the FCC, the FBI promptly retracted that position in the ESS meetings, insisting that such signaling had to be provided even though the switch generating the signal was not the target's switch. Now we see it in the ESI Simulator too.

The same scenario used a subject-initiated "800" call and then showed the identification of the answering party as an 800-number. This, of course, is a pure fabrication inasmuch as the 800-number in all cases would be translated to a North American telephone number for processing. Under JSTD-025, law enforcement would receive the translated number as part of normal messaging protocol. To show otherwise is a fabrication which can only distort the FCC's understanding of the issue.

Perhaps most disturbing was the false comparison between purported JSTD-025 scenarios and punch list scenarios. The presenters of the ESI Simulator not so subtly altered the assumptions about content channel management in two examples. The result was to make it appear that, without the punch list messages, law enforcement would be misled about what is happening to a call and who is connected to it. As was demonstrated at the presentation aptly by industry engineers, the comparison was misleading and even the FBI consultants had to agree that the comparison warranted further review.

In sum, the entire presentation was riddled with error. No reasonable implementation of JSTD-025 would produce the outcome represented in the presentation and even implementation

of the punch list as proposed by the FBI would not yield the information purported to be available or achievable in the carrier's network.

The Need for Corrective Action

The industry associations are submitting a request under separate cover to the FBI pursuant to the Freedom of Information Act for information related to the presentation. Because the FCC rulemaking on capabilities is in progress, we ask you to expedite delivery of the requested information so that industry will have an opportunity to set the record straight before the FCC and elsewhere.

We respectfully request that you order an immediate review of the presentation, discontinue its use until the completion of this review and that you inform the FCC, the Congress and all to whom the ESI presentation was made that you have instigated such a review. Industry experts would be pleased to meet with you and your staff to assist in this review and help insure an accurate presentation.

Sincerely,

Thomas E. Wheeler
President and CEO
Cellular Telecommunications
Industry Association (CTIA)

Roy M. Neel
President and CEO
United States Telephone
Association (USTA)

Jay Kitchen
President and CEO
Personal Communications
Industry Association (PCIA)

Matthew J. Flanigan
President
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cc: The Honorable William E. Kennard
The Honorable Susan Ness
The Honorable Michael K. Powell
The Honorable Harold Furchtgott-Roth

The Honorable Gloria Tristani
The Honorable Henry J. Hyde
The Honorable John Conyers, Jr.
The Honorable Bill McCollum
The Honorable Charles E. Schumer
The Honorable Bob Livingston
The Honorable David Obey
The Honorable Harold Rogers
The Honorable Alan B. Mollohan
The Honorable Orrin G. Hatch
The Honorable Patrick J. Leahy
The Honorable John Kyl
The Honorable Diane Feinstein
The Honorable Ted Stevens
The Honorable Robert C. Byrd
The Honorable Judd Gregg
The Honorable Ernest F. Hollings